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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/781,095

02/18/2004

Arthur James Harvey

16-294

6329

7590

06/29/2005

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EXAMINER

TANG, SON M

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 06/29/2005

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,095

Applicant(s)

HARVEY, ARTHUR JAMES

Examiner

Son M. Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-23 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-7 and 11-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Jaw [US 6,490,543] in view of Dwyer et al. [US. 4,688,117; Dwyer].

Regarding to claim 1: Jaw discloses an hour meter having a display 108 that provides a visual indication of a total time an engine has operated and a visual indication of an operation time remaining in a predetermined service time interval, comprising:

-a display 108, includes level bar 112 (time used) and level bar 114 (remaining time), and a predetermined service interval (life expectancy time) met by a whole length of level bar 112 (from 0 to 1000), and a first optical state (met by a shaded area) and a second optical state (met by a clear area) of indicator 112, whereby the first optical state (shaded) would obviously to increment toward second optical state (clear) when a given portion of the predetermined service time interval has elapsed [as shown in Fig. 4-5, col. 1, lines 25-33 and col. 7, lines 15-25], Jaw does not specifically disclose a display drive, however, in an electrical art it is common for a display uses display driver to control the output of display. Therefore, Examiner takes Official Notice that a display drive is known in the art

of display system. Jaw does not specifically disclose a plurality of segments on the display that are selectively displayed in a first optical state or second optical state. Dwyer teaches a display 44 comprises a plurality segments (bar graph display) that selectively displayed in a first optical state or second optical state, corresponding to the length of the tape transported (recorded), wherein each segment represent a specific length (time) [as shown in Fig. 1 and col. 8, lines 34-45]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to use the segments display of Dwyer in the display of Jaw, for the purpose of easy to recognize the amount of time on the display, since each segment represents a specific amount of time.

Regarding to claim 2: Jaw and Dwyer discloses all the limitation as described above, except for not specifically mention that the first segment remains in the second optical state while said remainder of the predetermined service time interval elapses. As it shown in Fig 5 of Jaw, the life used indication 112 has two states (sides) (shaded and clear), whereby the shade side will increase toward the clear side when the predetermined service time interval elapses, thus, the first segment (used time) remains in the second optical state (shaded side). It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to recognize that the shaded side is constitutes of the first segment that remains in the second optical state, which indicates the time used.

Regarding to claims 3 and 6: Jaw and Dwyer discloses all the limitation as described above, Jaw further discloses that wherein the first optical state (used life

level) is being reset when a predetermined service time interval elapses (serviced/replaced time) [as cited in col. 3, line 1-12].

Regarding to claims 4-5: Jaw and Dwyer discloses all the limitation as described above, Dwyer further teaches that all the segments 44 are displayed and remain in the second optical state for (used time) after the predetermined service time interval elapsed, to provide a visual indication that service is due [see Fig. 1, col. 8, lines 42-47].

Regarding to claim 7: Jaw and Dwyer discloses all the limitations as described above, Jaw further discloses that the remaining life is at such a level of service, after serviced the lifeometer resets the remaining/used life levels to an appropriate values for the serviced (next service time interval) [col. 3, lines 2-8], that is constitutes of the claimed of a next service time interval after the service time interval has elapsed.

Regarding to claims 11-18: The claimed method steps are interpreted and rejected as rejection stated above.

3. Claims 8-10, 19-22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaw in view of Dwyer et al. in claim 1 above, and further in view of Yamazaki et al. [US 5,408,224; Yamazaki].

Regarding to claim 8: Jaw and Dwyer discloses all the limitations as described above, except not specifically mention a reset switch for manually resetting the predetermined time interval and the display. Yamazaki teaches a monitoring device comprises a resetting switch G that resets the time and display [as shown in Fig. 1, col. 4, lines 42-50]. It would have been obvious of one having ordinary skill in the art at the time

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of the claimed invention, to have a manual reset switch as taught by Yamazaki into the combination above, for the benefit of convenience to reset whenever the user like or earlier service reset which is being done prior to the predetermined interval time elapses.

Regarding to claim 9: The manual reset switch has been described in claim 8 above. Jaw further stated that the time remaining life level and used life level are being reset after the system/part is serviced [col. 3, lines 2-9]. Thus, it would have been obvious of one having ordinary skilled in the art to recognize that the reset of Jaw is constitutes of automatically resets the display as claimed.

Regarding to claims 10 and 23: Jaw discloses an hour meter having a display 108 that provides a visual indication of a total time an engine has operated and a visual indication of an operation time remaining in a predetermined service time interval, comprising:

-a display 108, includes level bar 112 (time used) and level bar 114 (remaining time), and a predetermined service interval (life expectancy time) met by a whole length of level bar 112 (from 0 to 1000), and a first optical state (met by a shaded area) and a second optical state (met by a clear area) of indicator 112, whereby the first optical state (shaded) would obviously to increment toward second optical state (clear) when a given portion of the predetermined service time interval has elapsed [as shown in Fig. 4-5, col. 1, lines 25-33 and col. 7, lines 15-25], Jaw does not specifically disclose a display drive, however, in an electrical art it is common for a display uses display driver to control the output of display. Therefore, Examiner takes Official Notice that a display drive is known in the art of display system. Jaw does not specifically disclose a plurality of segments on the

display that are selectively displayed in a first optical state or second optical state. Dwyer teaches a display 44 comprises a plurality segments (bar graph display) that selectively displayed in a first optical state or second optical state, corresponding to the length of the tape transported (recorded), wherein each segment represent a specific length (time) [as shown in Fig. 1 and col. 8, lines 34-45]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to use the segments display of Dwyer in the display of Jaw, for the purpose of easy to recognize the amount of time on the display, since each segment represents a specific amount of time.

Jaw further stated that the time remaining life levels and used life level is being reset after the system/part is serviced [col. 3, lines 2-9]. Thus, it is obvious of ordinary skill artisan to recognize that the lifeometer reset of Jaw is constitutes of automatically resets the segments display, without actuates manual reset switch. However, Jaw lacks of specifically mention a manual reset switch for manually resetting the predetermined time interval and the display. Yamazaki teaches a monitoring device comprises a reset switch G that resets the time and display [as shown in Fig. 1, col. 4, lines 42-50]. Therefore, it would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to have a manually reset switch as taught by Yamazaki into the combination above, for the benefit of convenience to reset the predetermined interval time and the display at any time the user desired, i.e. user resets the system at earlier serviced or prior to the predetermined interval time elapses.

Regarding to claims 19-22: The claimed method steps are interpreted and rejected as rejection stated above.

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Conclusion


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pollack [US 5,153,580], Comeau et al. [US 4,912,458], Derryberry et al. [US 6,225,907], Hansen et al. [US 4,539,632], Yamamoto et al. [US 6,141,629] and Paine [US 4,617,639].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M. Tang whose telephone number is (571)272-2962. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang


Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2632